

DP-309769

FRAME-BASED OCCUPANT WEIGHT ESTIMATION
APPARATUS HAVING COMPLIANT LOAD TRANSFER MECHANISM

Abstract of the Disclosure

A frame-based occupant weight estimation apparatus for a vehicle seat includes compliant load transfer mechanisms interposed between the seat frame and floor brackets bolted to the vehicle floor. The compliant load transfer
5 mechanisms translate the seat loads to a central location for measurement by a set of force sensors. The load transfer mechanisms preload the force sensor to enable off-loading detection, and an overload device securely anchors the seat to the floor bracket without interfering with normal load measurement.